

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 31-34 are requested to be withdrawn.

Claims 17, 24, 35, and 37 are currently being amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. This amendment also corrects minor typographical errors in the specification at paragraphs 4, 6, and 27.

After amending the claims as set forth above, claims 1-30 and 35-37 are now pending in this application.

Applicants have amended the claims herein to more succinctly claim their invention and to obtain a speedier allowance of this application into an issued patent. Applicants reserve their right to file additional claims in a divisional, continuation, or continuation-in-part application directed to other subject matter.

Response to Restriction

The Office Action dated February 25, 2004, requests restriction of the application to the claims of Group I (Claims 1-30 and 35-37) drawn to an oil extraction process or to Group II (Claims 31-34) drawn to an organic composition. Applicants confirm their election to the claims of Group I, without traverse. Accordingly, Claims 31-34 have been withdrawn from examination.

Response to 35 U.S.C. § 102(b) Rejection

The Office Action has rejected claims 1-6, 8-10, 12, 14, and 17-20 under 35 U.S.C. § 102(b) as being anticipated by Crawford et al. (U.S. Patent No. 2,596,010). The Office

Action states that Crawford discloses using an isohexane solvent to form an extraction mixture, where the isohexane solvent includes 95% methylpentane and has less than 0.5% of aromatic. (Page 3). However, claim 1 and amended claim 17 each require (among other combinations of subject matter) "no more than about 0.1 wt.% hydrocarbons having less than 6 carbon atoms." Crawford fails to disclose this limitation. Accordingly, Crawford cannot anticipate independent claims 1 and 17. Further, Crawford cannot anticipate claims 2-6, 8-10, 12, and 14, which are dependent from claim 1, and claims 18-20, which are dependent from amended claim 17.¹

All claims recite a species of isohexane for use in oil extraction with unexpected and unappreciated results not disclosed in Crawford. Thus, claim 1 and amended claim 17 also cannot be rendered obvious under 35 U.S.C. § 103 in view of Crawford. Applicants have discovered that an isohexane solvent with a significantly reduced amount of hydrocarbons having less than 6 carbon atoms prevents the escape of hydrocarbons in the atmosphere. As addressed in Applicants' specification at paragraph 43, minor variations in the chemical composition of the isohexane solvent can significantly affect the required cooling surface area (e.g., a 2°F difference in wet bubble point temperature decreases the required cooling surface area by about 20%, about a 3°F difference decreases the required surface cooling area by about 37%, and a 4°F difference decreases the required surface cooling areas by about 50%).

However, Crawford actually teaches away from using an isohexane with a low amount of hydrocarbons having less than 6 carbon atoms. In particular, Crawford discloses that the use of isopentane (a C5 hydrocarbon) "can be employed with excellent results." (Col 2, l. 50-Col. 3, l. 1). Accordingly, Applicants respectfully request that the Examiner allow independent claims 1 and 17, and the claims dependent therefrom.

¹ The Office Action also states that "[i]t would be expected that the Crawford solvent would have the wet dew point as claimed." (Page 4). Although Applicants believe claim 1 and claim 17, as amended, are distinguishable over Crawford for the reasons provided herein, Applicants also note that Crawford does not disclose the functional limitations of wet bubble point temperature found in independent claims 1, 17, and 24. Without providing any basis for such an assertion, the Office Action has failed to establish a *prima facie* case for anticipation or obviousness of claim limitations recited in claims 1, 17, and 24.

Response to 35 U.S.C. § 103(a) Rejection

The Office Action has also rejected claims 7, 11, 13, 15, 16, 21-30, and 35-37 under 35 U.S.C. 103(a) as being unpatentable over Crawford. However, as shown herein, Crawford fails to disclose the use of an isohexane solvent having "no more than about 0.1 wt.% hydrocarbons having less than 6 carbon atoms" as recited in every independent claim (as amended and/or as originally presented). Indeed, Crawford teaches away from such a limitation by advocating the use of isopentanes, a hydrocarbon with 5 carbon atoms. (Col 2, l. 50-Col. 3, l. 1). Independent claim 21 and amended claims 24 and 35 each include the limitation "no more than about 0.1 wt.% hydrocarbons having less than 6 carbon atoms." Because Crawford fails to disclose this limitation and actually teaches away from using an isohexane solvent with such a low amount of hydrocarbons with less than 6 carbon atoms, Crawford cannot render obvious the subject matter recited in any of the pending independent claims.² For the same reasons above, Applicants request that the Examiner allow independent claims 21, 24 and 35, and the claims dependent therefrom.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of

² The Office Action also states it would be obvious to use an isohexane having less than 10 ppm benzene because Crawford discloses using less than 0.5 vol. % of aromatic (5000 ppm of aromatic). However, this is a difference of 2.5 orders of magnitude which Applicants believe is significant.

papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R.
§ 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

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